

REMARKS/ARGUMENTS**Claim Rejections -35 USC §112**

The Examiner rejected claims 8, 9 and 40 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated: “[T]he phrase ‘FDA approved foam material’ is unclear since FDA approved materials are subject to constant review and removal from the FDA’s approval listing. Therefore, a material which is FDA approved today might not be FDA approved tomorrow. Therefore, a person of skill in the art would be unable to ascertain the metes and bounds of the claimed invention due to the constantly changing nature of the FDA approval listing.”

Applicant has removed the phrase “FDA approved” from claims 8, 9 and 40 thus satisfying the Examiner’s rejection.

Claim Rejections -35 USC § 103

The Examiner rejected claims 1, 2, 3, 38, 39 and 41-42 under 35 U.S.C. 103(a) as being unpatentable over Lonardo (U.S. Patent No. 4,782,825) in view of Nuzzo et al. (U.S. Patent No. 4,383,571) and Carr-Stock (U.S. Patent 6,165,148). The Examiner stated: “In Figs. 5-6, Lonardo discloses a planar hand-mounting member 10 formed without a thumb. Lonardo also discloses a thumb-mounting member 12. However, Lonardo fails to disclose wherein the hand-mounting member extends beyond the outer dimensions of a human hand and wherein the thumb-mounting member extends beyond outer dimensions of a human thumb and rotates in an arc. Since Lonardo does disclose in Figs. 5-6 that the hand-mounting member almost extends beyond the user’s hand, the Office takes the position that it would be obvious to one skilled in the art to extend the splint of Lonardo beyond the user’s hand for the purpose of providing additional support to the user’s hand, arm and fingers. Furthermore, Nuzzo, which also relates to a splint without a thumb, also discloses a thumb member which extends beyond the user’s thumb and rotates in an arc (Nuzzo, Fig. 4). Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the support arm 50 of Lonardo based upon the teaching of Nuzzo

for the purpose of providing greater movement and flexibility of the user's thumb during rehabilitation.

Lonardo also fails to disclose slots and straps as recited in the claims. However, Carr-Stock teaches as an example that it is well known in the rehabilitation art to use straps as a means for securing and fastening a device to a user's limb."

Applicant respectfully traverses this rejection. The Lonardo invention is entirely different from the instant invention. First, the Lonardo invention is definitely not planar. As can be plainly seen in Figures 1-6, the Lonardo invention 10 curves slightly downwards where the arrow 18 points and then sharply upwards to the hand support portion 26. Second, the thumb support 50 or 56A of Lonardo is fixedly attached at right angles to the hand support portion 26. Thus it crosses under the hand support portion 26 and the fingers and only supports a portion of the thumb. See Figures 3-6. In sharp contrast, as the Examiner has recognized, the thumb support 95 of the instant invention is pivotally attached at the side 60 of the hand support 15. In this configuration the thumb support 95 does not pass under the hand support 15 and supports the entire extent of the thumb. See Figure 2.

Also, it is not obvious to extend the members of Londardo's invention to beyond the outer dimensions of the human hand and thumb. There has to be some reason for doing so. Additional support can be provided simply by extending Lonardo's invention to the outer dimensions of the human hand and thumb. Figure 5 provides a partial example. There is no additional advantage to extend Lonardo's invention beyond the outer dimensions of the human hand and thumb. In sharp contrast there is a very important reason for extending the members of the instant invention to beyond the outer dimensions of the human hand and thumb. This reason is to provide sufficient material for insertion of the slots 70, 75, 140 and 145. See Figure 1. Straps 80 and 150 are threaded through these slots and used to fasten down the fingers and thumb. See Figure 2.

Additionally, Nuzzo does not disclose a thumb member. He discloses a multipurpose support 15 which is curved. Second, all one would get by combining Lonardo and Nuzzo would be a pivoting member 50. Thus, it is not obvious to modify the support arm 50 of Lonardo based upon the teaching of Nuzzo.

Finally, slots 70, 75, 140 and 145 are not disclosed in any of the cited prior art. And the straps of Carr-Stock are completely different from those of the instant invention. In Carr-Stock the straps 16, 18, 20 and 22 are attached to the cover 14. Further one side of the hook and loop fastener 16C, 18C, 20C and 22C is on the ends of the straps while the mating side 70, 72, 74 and 76 is on the cover. In contrast, in the instant invention the straps 80, 150 are separate and not attached to anything. Moreover, both sides of the hook and loop fastener 175, 190 are attached to the strap 80, 150.

The Examiner stated: "Regarding claim 2, Carr-Stock clearly discloses hooking and looping elements used for attaching the restraining straps.

Regarding claim 3, Nuzzo teaches that the thumb-mounting member is lockable in a plurality of positions about a point where the thumb-mounting member is rotatably attached (Fig. 4).

Regarding claim 38, Nuzzo discloses a plurality of notches positioned along arcuate slot 46.

Thus, it would have been obvious to one skilled in the art to move the arcuate slot 46 of Nuzzo from the middle of the splint to either side of the splint for the purpose of improving the rotation of the thumb.

Regarding claims 39 and 41-42, Carr-Stock teaches that cover 14 serves as padding so that the knuckles of the user's hand are positioned above the user's fingers (Nuzzo, Fig. 2). Cover 14 is also washable, removable and replaceable (Nuzzo, col. 1, lines 49-67)."

It is well known that dependent claims contain all the limitations of the claims from which they depend. Since claims 2, 3, 38, 39 and 41-42 all depend from claim 1, and the rejection of claim 1 was traversed, above, the rejections of claims 2, 3, 38, 39 and 41-42 also stand traversed.

The examiner rejected claims 4-6, 10-11, 13-14, 15-17, 20 under 35 U.S.C. § 103(a) as being unpatentable over Lonardo, Nuzzo and Carr-Stock and in further view of Wang (U.S. Patent No. 6,443,918). The Examiner stated: "As discussed above the combination of Lonardo, Nuzzo and Carr-Stock discloses the claimed invention with the exception of an arm-rest portion having a hand-shaped section and an extension section. However, Wang, which also relates to a rehabilitation device, discloses a two-piece orthosis having a hand-section 12 and an arm section

14 which are attached to each other by way of straps. Foam pad 74 is provided as padding to fit within the upper and lower sections of the splint to provide additional comfort. Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the hand splint of the combination of Lonardo, Nuzzo and Carr-Stock with the forearm extension of Wang for the purpose of providing additional comfort to the user's upper arm."

Applicant has already traversed the combination of Lonardo, Nuzzo and Carr-Stock above. In addition, Wang is an entirely different invention. Again Wang is definitely not planar, while the instant invention is. Further, the Wang invention, as pointed out by the Examiner, is in two pieces, attached by straps. The instant invention always comprises a one piece hand and arm support 240. See Figures 4 and 5. Thus the Applicant further traverses the inclusion of Wang in this rejection.

The Examiner stated: "Regarding claims 10-11, Carr-Stock discloses in col. 1, lines 51-67 a washable, removable and replaceable cover.

Regarding claims 13-14 and 20, Carr-Stock teaches that it is known to employ a variety of slots and hooking and looping portions.

Regarding claims 15-17, Wang also teaches that it is known to use a leaf spring 60 to affix a first portion and a second portion of a splint. Foam pad 74 provides padding for the upper and lower surface of the support platform of the splint."

It is well known that dependent claims contain all the limitations of the claims from which they depend. Since claims 4-6, 10-11, 13-14, 15-17, 20 all depend from claim 1, and the rejection of claim 1 was traversed, above, the rejections of claims 4-6, 10-11, 13-14, 15-17, 20 also stand traversed.

Allowable Subject Matter

The Examiner stated: "Claims 7, 12, 18, 19, 21, 22, 23, 24, 25-27, 28, 29, 30, 31, 32, 33, 34, 35-37, are objected to as being dependent upon a rejected base claim, but would be allowable if

rewritten in independent form including all of the limitations of the base claim and any intervening claims.”

The Applicant has added the following new claims:

New claim	Depends from	Equivalent to claims
43	--	7, 4 and 1
44	43	--
45	--	12, 4 and 1
46	45	--
47	--	18, 15 and 1
48	47	--
49	--	19 and 1
50	--	21, 20 and 1
51	50	--
52	--	22 and 1
53	52	--
54	--	23, 20 and 1
55	54	--
56	49	24
57	--	25, 20 and 1
58	57	--
59	57	26
60	57	27
61	--	28 and 1
62	61	--
63	61	29
64	--	30, 20 and 1
65	64	--
66	64	31

67	--	32 and 1
68	67	--
69	67	33
70	69	34
71	67	35
72	67	36
73	--	37, 3 and 1

These claims should be allowable.

Conclusion

The Examiner stated: "The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dale (U.S. Patent No. 4,960,114); Carter (U.S. Patent No. 6,094,756); Brink (U.S. Patent No. 4,576,351); Bzoch (U.S. Patent No. 5,718,671); Bodine, Jr. (U.S. Patent NO. 5,060,638)." The Applicant has reviewed the prior art made of record and not relied upon but does not consider that they affect the patentability of his invention.

An additional fee of \$1,725.00 is due on account of the above amendments. See attached Patent Application Fee Determination Record. A credit card authorization for this amount is attached. Reconsideration of this application and its early allowance are respectfully requested in view of the above presented amendments and remarks.

Respectfully submitted,

BELASCO JACOBS & TOWNSLEY, LLP

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By: 

David A. Belasco
Registration No. 41,609
Attorney for Applicant